In The Claims:

Please amend claims 1-18, as follows.

1. (Currently Amended) A device for forming an image ~~from a plurality of sub images, the device~~ comprising: ~~which is composed of a plurality of sub-areas ($T_1$ to $T_N$), which device includes~~

a single-surface detector which includes a plurality of sensor elements for generating image data, said sensor elements arranged in groups for forming a plurality of sub-areas (T1 to TN) of the image, where each sub-image corresponds to each sub-area;

read-out units ($V_1$ to $V_N$) ~~which are~~ associated with the sub-areas ($T_1$ to $T_N$) of the image,

an analysis unit ~~(12) which is~~ arranged to evaluate image data from adjoining image areas ($S_{63}$ and $S_{66}$) of neighboring sub-areas ($T_1$ and $T_2$) and to generate correction data, and

a correction unit ~~(13) which is~~ arranged to correct incorrect image data by means of the correction data.

2. (Currently Amended) The ~~A~~ device as claimed in claim 1, wherein ~~characterized in that~~ the ~~detector includes a plurality of~~ sensor elements ~~which are~~ arranged in rows and columns forming a matrix.

3. (Currently Amended) The ~~A~~ device as claimed in claim 2~~1~~, wherein the ~~characterized in that~~ rows or columns, or parts thereof, constitute an image area, that a plurality of image areas constitute a sub-area, and wherein ~~that~~ amplifiers are included ~~arranged so as~~ to read out image data from the sub-areas.

4. (Currently Amended) The ~~A~~ device as claimed in claim 1, further comprising ~~characterized in that~~ ~~there is provided~~ a memory ~~(14)~~ for storing the correction data.

5. (Currently Amended) The ~~A~~ device as claimed in claim 1, wherein ~~characterized in that~~ the image data is applied to the analysis unit ~~(12)~~ at a reduced rate.

6. (Currently Amended) The~~A~~ device as claimed in claim 3~~1~~, <u>wherein</u>
~~characterized in that~~ the analysis unit ~~(12)~~ is arranged to receive image data from adjoining columns
of neighboring amplifiers, and
includes a histogram generator ~~(15)~~ for generating histograms of the image data received, and
a summing unit ~~(16)~~ for forming cumulative histograms from the histograms, and
an adaptation unit ~~(17)~~ for forming a functional dependency between the amplification
characteristics of the amplifiers of neighboring columns and for generating correction data.


7. (Currently Amended) The~~A~~ device as claimed in claim 6, <u>wherein</u>
~~characterized in that~~ the histogram generator ~~(15)~~ is arranged to receive the image data and to
generate histograms over a selectable period of time.


8. (Currently Amended) The~~A~~ device as claimed in claim 1, <u>wherein</u>
~~characterized in that~~
the analysis unit <u>further comprising</u> ~~(12) includes~~
means ~~(20)~~ for forming an estimated value $(SW_{65})$ for the image value $(GW_{65})$ of a pixel $(P_{65})$ of a
sub-area $(T_2)$ to be corrected, the pixel $(P_{65})$ being situated at a boundary (G) with a neighboring sub-
area $(T_1)$, while utilizing an image value $(GW_{64})$ of the adjoining image area $(S_{64})$ of the neighboring
sub-area $(T_1)$, and
means ~~(21, 22)~~ for forming a correction value for the relevant image value $(GW_{65})$ in the sub-area
$(T_2)$ to be corrected by comparison of the actual image value $SW_{65}$ of the pixel $(P_{65})$ with the
estimated value $(SW_{65})$.


9. (Currently Amended) The~~A~~ device as claimed in claim 8, <u>wherein</u>
~~characterized in that~~
the analysis unit <u>further comprises</u> ~~includes~~ means ~~(20)~~ for extrapolating across the boundary (G) the
image values $(GW_{63}, GW_{64})$ of pixels $(P_{63}, P_{64})$ of an image area $(S_{63}, S_{64})$ of the neighboring sub-
area (T1), adjoining the pixel $(P_{65})$ of the sub-area $(T_2)$ to be corrected.


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10. (Currently Amended) A method of forming an image <u>using image data acquired from</u> ~~which is composed of~~ a plurality of sub-areas ($T_1$ to $T_N$) <u>of a flat dynamic x-ray detector,</u> wherein a read-out unit ($V_1$ to $V_N$) is associated with each sub-area, <u>and wherein</u>
~~characterized in that~~ <u>the</u>
image data from adjoining image areas ($S_{63}$ and $S_{66}$) of neighboring sub-areas ($T_1$ and $T_2$) is evaluated in order to mitigate differences between amplifier characteristics.

11. (Currently Amended) <u>The</u>~~A~~ method as claimed in claim 10, <u>further including determining</u>
~~characterized in that~~
an estimated value ($SW_{65}$) ~~is determined~~ for an image value ($GW_{65}$) of a pixel ($P_{65}$) of a sub-area ($T_2$) to be corrected, the pixel ($P_{65}$) <u>located</u> ~~being situated~~ at a boundary (G) with a neighboring sub-area ($T_1$), <u>said estimating carried out</u> ~~while~~ utilizing the image value ($GW_{64}$) of a pixel ($P_{64}$) of the adjoining image area ($S_{64}$) of the neighboring sub-area ($T_1$), <u>and determining</u> a correction value for the relevant image value ($GW_{65}$) in the sub-area ($T_2$) to be corrected ~~being determined~~ by comparison of the actual image value ($GW_{65}$) of the pixel ($P_{65}$) and the estimated value ($SW_{65}$).

12. (Currently Amended) <u>The</u>~~A~~ method as claimed in claim 10, <u>further including using</u>
~~characterized in that~~
a directly adjacent pixel of the neighboring sub-area ~~is used~~ as the estimated value of the image value.

13. (Currently Amended) <u>The</u>~~A~~ method as claimed in claim 10, <u>further including extrapolating</u>
~~characterized in that~~
the image values ($GW_{63}$, $GW_{64}$) of pixels ($P_{63}$, $P_{64}$) of the adjoining image area ($S_{63}$, $S_{64}$) of the neighboring sub-area ($T_1$), ~~are extrapolated~~ across the boundary (G) in order to determine the estimated value ($SW_{65}$).

14. (Currently Amended) <u>The</u>~~A~~ method as claimed in claim 10, <u>further including forming</u>
~~characterized in that~~

a first correction value is formed for the image value ($GW_{65}$) of a pixel ($P_{65}$) of the sub-area ($T_2$) to be corrected, and determining an estimated value ($SW_{64}$) for the neighboring pixel ($P_{65}$) is determined for a neighboring pixel ($GW_{64}$) of the neighboring sub-area (T1), directly adjoining this pixel ($P_{65}$) of the sub-area ($T_2$) to be corrected, the forming and determining while utilizing image values ($GW_{65}$, $GW_{66}$) of the sub-area ($T_2$) to be corrected, forming a second correction value being formed by comparison of the estimated value ($GW_{64}$) and the actual image value ($GW_{64}$) of the neighboring pixel ($P_{64}$), and forming a common correction value for the relevant image value ($GW_{65}$) of the sub-area ($T_2$) to be corrected being formed from the first and the second correction value.

15. (Currently Amended) The A method as claimed in claim 10, further including forming characterized in that

a common correction value for the relevant image value in the sub-area to be corrected is formed from the correction values for the same image values of different pixels of the sub-area to be corrected.

16. (Currently Amended) The A method as claimed in claim 10, further including storing characterized in that

the correction values for the image values of the individual sub-areas ($T_1$ to $T_N$) are stored in an adaptation table (LUT) and are fetched from this table (LUT) for correction.

17. (Currently Amended) An X-ray examination apparatus which includes

an X-ray source for emitting X-rays and for forming an X-ray image,

a flat dynamic an X-ray detector for forming an optical image from the X-ray image, which detector includes sensor elements arranged in rows and columns and at least two amplifiers ($V_1$ to $V_N$) for reading out detected image data, at least one amplifier being associated with each of a plurality of sub-areas sub-area ($T_1$ to $T_N$) in order to read out detected image data, comprising characterized in that the apparatus includes

an analysis unit (12) for forming correction data on the basis of the evaluation of image data from adjoining image areas ($S_{64}$ and $S_{65}$) of neighboring sub-areas ($T_1$ and $T_2$), and

a correction unit (13) for correcting the incorrect image data by means of the correction data.

18. (Currently Amended) A computer program for the correction of image data derived from of an image a single-surface detector comprising which is composed of a plurality of sub-areas ($T_1$ to $T_N$), wherein a respective read-out unit ($V_1$ to $V_N$) is associated with sub-areas ($T_1$ to $T_N$) of the image and image data from image areas ($S_{64}$ and $S_{65}$) of adjoining sub-areas ($T_1$ and $T_2$) of neighboring read-out units ($V_1$ and $V_2$) is evaluated by formation of histograms in order to generate correction data after integration of the histograms, which correction data is used to adapt the image data from one sub-area ($T_2$) to the amplifier characteristic of the read-out unit ($V_1$) which amplifies the adjoining sub-area ($T_1$).